ABSTRACT OF THE DISCLOSURE

A computer system configuration having a minimum cost is decided automatically in a short time from the computer system configurations having necessary processing performance. The system configuration is expressed by four parameters (performance of CPU, number of CPUs, main memory capacity and I/O processing speed) and the four parameters with which the cost can be minimized are derived by utilizing the numerical analysis method using the method of undetermined multipliers of Lagrange or the like under predetermined constraints concerning a response time of transaction processing. On the other hand, the number of jobs which one CPU provided in the system can execute simultaneously is optimized. The system configuration in which the probability having the response time equal to or longer than A is equal to or lower than B and the cost is minimum is derived.